PROPOSED USE OF THE PLENARY POWERS TO DESIGNATE FOR THE GENUS "INDIANA" MATTHEW, 1902 (CLASS CRUSTACEA, ORDER OSTRACODA) A TYPE SPECIES IN HARMONY WITH ACCUSTOMED USAGE

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(Commission Reference : Z.N.(S.) 1159)

The purpose of the present application is to remove a threat to the stability of the name of the Cambrian Crustacean genus *Indiana* Matthew, 1902, which has been variously referred to the Orders Conchostraca, Bradorina and Ostracoda. It has been claimed that the first designated type-species for this genus is not that which has been universally applied since 1931 ; it has not been possible to substantiate this claim, but neither can it be definitely disproved. If the claim were to be substantiated, the generic name *Indiana* would disappear as a junior subjective synonym of *Bradoria* Matthew, 1899, and a new name would have to be found for the genus at present known as *Indiana* and for the family INDIANIDAE based upon it. Although the genus is not particularly well-known or important, it is clearly undesirable that it should be left in its present unstable nomenclatorial position. It is to be included in the forthcoming volume of the *Treatise on Invertebrate Paleontology* dealing with the Ostracoda, and the Commission is accordingly asked to remove the threat to its stability by use of its Plenary Powers.

2. The genus *Indiana* was proposed by Matthew, G. F. (1902, *Canadian Rec. Sci.*, Montreal **8** : 460) for four species, *I. ovalis*, *I. lippa* (both new) and *Primitia pyriformis* Matthew, 1898, and *P.* (?) *fusiformis* Matthew, 1895. With the species *I. ovalis* was associated also the new "mutation" *prima* (an infraspecific taxon).

3. Ulrich and Bassler (1931, *Proc. U.S. nat. Mus.* **78** : 68—70) revised the genus *Indiana* and made the following statement : "In the original description of *Indiana* by Matthew no genotype was designated. The first species following the generic diagnosis is *I. ovalis*, and this species, under the rules generally prevailing in such cases, has been cited as the genotype. Unfortunately, as has been already mentioned in discussing *Bradoria*, the genus cannot be maintained if founded on *I. ovalis*. The imperfect original type of this species, after careful comparison, was positively identified with a good species of *Bradoria* in the collections of the National Museum, from the same locality.

Being distinct, the specific name is retained and the species accordingly has been described on a preceding page under the name *Bradoria ovalis* . . . The hitherto accepted genotype of *Indiana* being an unqualified *Bradoria*, the former genus must either fall into synonymy, or be restored to good standing by the selection of another genotype. The latter course is thought the more advisable, because the genus, as constituted by Matthew, includes a distinguishable group of species, the essential characters of which are brought out in the above revised definition of *Indiana*. Of the other species originally referred to the genus by Matthew, *I. lippa* and *I. pyriformis* are perhaps equally characteristic of the revised genus. The type specimen of the former being rather better preserved than the other, it is selected as the genotype ".

4. Ulrich and Bassler were in error in supposing that the *Règles* demand that, in cases in which no type-species has been designated by the author, the first species to follow the generic diagnosis should automatically become the type species. On the other hand they state that " this species ", i.e., *I. ovalis*, " has been cited as the genotype ". Such citation might well qualify as the subsequent selection of the above species as the type-species by these authors themselves. Unfortunately, they do not indicate where such a citation has been published, and my own search of the literature has failed to discover any citation of a type-species for *Indiana* before that of Ulrich and Bassler themselves as quoted above.

5. If, however, *I. ovalis* has been validly selected as the type species of the genus before 1931, then Ulrich and Bassler had no power to " restore the genus to good standing " by selecting another type species, their selection of *I. lippa* would be invalid, and *Indiana* interpreted by *I. ovalis*, would rank as a junior subjective synonym of *Bradoria* Matthew, 1899.

6. Since 1931, however, the genus *Indiana* has been universally accepted as properly founded on *I. lippa*. Although it is not a particularly well-known genus, it has been listed (with this type species) in such general works as Shimer & Shrock (1944, *Index Fossils of N. America* : 657).

7. Ulrich and Bassler described, under the name *Indiana*, a genus containing twelve species besides *I. lippa* and five additional " doubtful " species (*op. cit.* : 71—85). They also founded a new family, INDIANIDAE, on the genus (*op. cit.* : 68). This genus and family are to be included in a forthcoming volume of the *Treatise on Invertebrate Paleontology*. No useful purpose would be served by introducing a new name for these taxa. The Commission is therefore invited to use its Plenary Powers to stabilise the genus with *I. lippa* as its type species.

8. Matthew (*op. cit.*) referred the genus *Indiana* to the Order Ostracoda ; Ulrich and Bassler (*op. cit.*) placed it in the Order Conchostraca ; P. E. Raymond (1935, *Bull. Mus. comp. Zool.* **76** : 205—230) placed it in a new

order Bradorina " leading to the Ostracoda ". In the forthcoming volume of the *Treatise on Invertebrate Paleontology* it is to be treated in a new suborder of the Order Ostracoda.

9. In view of the facts set out in the preceding paragraphs, I now request the International Commission on Zoological Nomenclature :—

(1) to use its Plenary Powers (a) to set aside all type-selections for the genus *Indiana* Matthew, 1902, made prior to the Ruling now asked for, and (b), having done so, to designate *Indiana lippa* Matthew, 1902, as type species of the foregoing genus ;

(2) to place the following name on the *Official List of Generic Names in Zoology* : *Indiana* Matthew, 1902 (gender : feminine) (type species by designation under the Plenary Powers under (1)(b) above : *Indiana lippa* Matthew, 1902) ;

(3) to place the following name on the *Official List of Specific Names in Zoology* : *lippa* Matthew, 1902, as published in the combination *Indiana lippa* (specific name of the type species of *Indiana* Matthew, 1902) ;

(4) to place the following name on the *Official List of Family-Group Names in Zoology* : INDIANIDAE Ulrich and Bassler, 1931 (type-genus : *Indiana* Matthew, 1902).

SUPPORT FOR THE PROPOSAL BY DONALD BAIRD ON THE GENERIC NAMES " ANCHISAURIPUS " LULL, 1904, AND " OTOUPHEPUS " CUSHMAN, 1904 (CLASS REPTILIA : THEROPODA [ICHNITES])

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(Commission Reference : Z.N.(S.) 1081)

(For the proposal in this case see *Bull. zool. Nomencl.* **12** : 221—224)

(Letter dated 21st November 1956)

Dr. Donald Baird of Harvard University has sent to me the separate of his paper proposing the use of the Plenary Powers to protect the generic name *Anchisauripus* Lull, and to suppress the generic name *Otouphepus* Cushman.

I am particularly interested in this proposal, because I have been doing detailed research on Triassic reptiles and amphibians during these past few years. This letter is being written in support of Dr. Baird's proposal. I am heartily in favor of it, and I think that if it is adopted it will clarify nomenclature of these particular Triassic forms, and certainly will help to prevent confusion in future literature.